

## Agricultural Fields and Filter Strips

Please fill in the gray areas below. Once you have estimated the load reductions, print a copy of this worksheet and attach it to the 319A or 319U Cost-Share Form.

IDEM Project Manager:  
Project ARN:  
Landowner Initials:  
Date practices completed:

Example	
	JA
03-771	02-999
	HJK
	8/8/2003

Please check which BMPs apply:

Please select a state and a county, and default USLE pa

Indiana County

Please fill in the gray areas below:

Example				
USLE or RUSLE	Before Treatment	After Treatment	Before Treatment	After Treatment
Rainfall-Runoff Erosivity Factor (R)	180.00	180.00	120	120
Soil Erodibility Factor (K)	0.35	0.35	0.35	0.35
Length-Slope Factor (LS)	0.40	0.40	0.44	0.44
Cover Management Factor (C $\leq$ 1.0)*	0.20	0.20	0.7	0.5
Support Practice Factor (P $\leq$ 1.0)*	1.00	0.50	0.775	0.11
Predicted Avg Annual Soil Loss (ton/acre/year)	5.14	2.57	10.03	1.02

\* User must use the local C and/or P values to obtain the reduction due to the field practices.

Example		
Enter contributing area (acres)	50	14

The portion of the treated field which contributes eroded soil to the waterbody. The contributing area is defined by runoff flowpath

Sediment Delivery Ratio

Example	
0.58	0.68

runoff flowpat  
actual treated  
area within a  
flowpaths, ple

Sediment Delivery (ton/acre/year)

Before Treatment	After Treatment	
3	1	7

into the box b

runoff flowpath and by topography and may differ in size from the actual treated field.

Please select a gross soil texture:

Clay (clay, clay loam, and silt clay)  
Silt (silt, silty clay loam, loam, and silt loam)  
Sand (sand, sandy clay, sandy clay loam, sandy loam, and loamy sand)  
Peat

**Estimated Load Reductions for Agricultural Field Practices**

	<b>Treated</b>	<b>Example</b>
Sediment Load Reduction (ton/year)	74	<b>85</b>
Phosphorus Load Reduction (lb/year)	81	<b>100</b>
Nitrogen Load Reduction (lb/yr)	163	<b>200</b>

#### **Estimated Additional Load Reductions through Filter Strips**

	<b>Filter Strips</b>	<b>Example</b>
Sediment Load Reduction (ton/year)	48	<b>92</b>
Phosphorus Load Reduction (lb/year)	82	<b>114</b>
Nitrogen Load Reduction (lb/yr)	153	<b>227</b>

#### **Total Estimated Load Reductions**

	<b>Total</b>	<b>Example</b>
Sediment Load Reduction (ton/year)	123	<b>177</b>
Phosphorus Load Reduction (lb/year)	164	<b>214</b>
Nitrogen Load Reduction (lb/yr)	316	<b>427</b>

Pennsylvania State University. 1992. Nonpoint Source Database. In U.S. EPA, Guidance specifying management for sources of nonpoint pollution in coastal waters, page 2-15.

Parameter values will be entered.

**Application of BMPs will change C and/or  
P values in the USLE, and may include (check BMP(s) that apply):**

Prescribed Grazing  
Residue Management, Mulch Till  
Conservation Crop Rotation  
Conservation Cover  
Cover and Green Manure  
Critical Area Planting  
Stripcropping, Contour  
Stripcropping, Field  
Stripcropping, Field

\* Filter Strips may further reduce sediment by 65%, phosphorous by 75%,  
and by the and nitrogen by 70% based on Pennsylvania state university (1992).  
th and by area within a treated field. Using topographic maps and evidence of  
l field. Th flowpaths, please estimate the Contributing Area (acres) and enter it  
treated fie into the box below.

ase estimate the Contributing Area (acres) and enter it

After Treatme nt
1

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